

CLAIMS

1. Methods of three dimensionally displaying an eyeground and measuring the coordinates thereof, comprising

5 a shape measuring step (A) in which the size L of an eyeball and the shape R of the eyeground are measured using a measuring device,

an eyeball setting step (B) for setting an eyeball template according to the measured size and shape,

10 an eyeground image taking step (C) for taking images of the eyeground including superimposed portions d by shifting imaging positions by a predetermined amount H,

a parameter setting step (D) for obtaining an eyeball parameter g that represents the positional relationship between
15 the eyeground and images according to positions H of the superimposed portions on the images,

an image pasting step (F) for pasting a number of images on the eyeball template according to the eyeball parameter g, and

a three dimensional image displaying step (H) for
20 displaying three dimensional eyeground images from the eyeball template on a display device.

2. The methods of three dimensionally displaying an eyeground and measuring the coordinates thereof, specified in Claim 1, also comprising an image/position recording step (E)
25 for recording images taken in the eyeground image taking step (C) and the positional relationship between the eyeball and the

imaging device corresponding to each image.

3. The methods of three dimensionally displaying an eyeground and measuring the coordinates thereof, specified in Claim 1, also comprising an image position matching step (G) for
5 adjusting the positions of eyeground images on a plane of the eyeground according to the corresponding points in the superimposed portions d.

4. The methods of three dimensionally displaying an eyeground and the measuring coordinates thereof, specified in
10 Claim 1, also comprising a characteristic portion indicating step (J) for indicating characteristic portions on the three dimensional eyeground images shown on the display device,

a three dimensional coordinate defining step (K) for obtaining three dimensional coordinates of the indicated
15 portions,

a characteristic portion measuring step (L) for measuring sizes of indicated portions, and

a data saving step (M) for storing measured data in a recording medium.

20 5. A program for three dimensionally displaying eyeground, measuring coordinates thereof, and operating a computer to execute

a shape measuring step (A) in which the size of an eyeball and the shape of the eyeground are measured,

25 an eyeball template setting step (B) for setting an eyeball template according to the measured size and shape,

an eyeground image taking step (C) for taking images of the eyeground including superimposed portions by shifting the imaging positions by a predetermined amount,

a parameter setting step (D) for obtaining an eyeball
5 parameter that represents the positional relationship between the eyeground and images,

an image pasting step (F) for pasting a number of images on the eyeball template according to the eyeball parameter, and

a three dimensional image displaying step (H) for
10 displaying three dimensional eyeground images on the eyeball template.

6. A computer readable storage medium that stores a program for displaying an eyeground three dimensionally and measuring the coordinates thereof, to operate the computer to
15 execute

a shape measuring step (A) in which the size of an eyeball and the shape of the eyeground are measured,

an eyeball template setting step (B) for setting an eyeball template according to the measured size and shape,

20 an eyeground image taking step (C) for taking images of the eyeground including superimposed portions by shifting the imaging positions by a predetermined amount,

a parameter setting step (D) for obtaining an eyeball parameter that represents the positional relationship between
25 the eyeground and images,

an image pasting step (F) for pasting a number of images on

the eyeball template according to the eyeball parameter, and
a three dimensional image displaying step (H) for
displaying three dimensional eyeground images on the eyeball
template.